



# Evaluation of Air Toxics Monitoring in EPA Region 9

February 2008

## Fact Sheet

### Introduction

EPA Region 9—comprised of SLTs in Arizona, California, Hawaii, and Nevada—has one of the largest and most well-developed set of air toxics monitoring programs in the country. EPA Region 9 has also been cited as having areas with the highest level of risk from air toxics. This evaluation was launched to assess the design and implementation of locally- and nationally- funded air toxics monitoring activities across the region and identify ways in which program effectiveness can be improved based on the experiences of SLTs throughout EPA Region 9 and EPA Program Managers and staff.

### Evaluation Questions

This evaluation explored four key objectives:

1. Characterize air toxics monitoring programs across EPA Region 9, including identification of SLT objectives as well as those of EPA Region 9
2. Assess the design of EPA Region 9's air toxics monitoring programs and the extent to which they meet stated objectives
3. Distinguish ways in which EPA Region 9's monitoring programs contribute to the objectives of the national air toxics monitoring program and areas for improvement
4. Identify potential performance metrics for evaluating air toxics monitoring programs at national and regional levels

### Evaluation Methods

This evaluation included a series of interviews and analysis of data in the EPA Air Quality System (AQS) database. At the onset of the evaluation, officials from EPA OAQPS, EPA Region 9, and EPA Region 5 provided input on the direction and objectives of the evaluation. Next, officials representing nine state and local agencies and tribes (SLT) in the region were interviewed to collect data on the four evaluation questions listed above. The SLTs represented in this evaluation were the Arizona Department of Environmental Quality, Bay Area Air Quality Management District, California Air Resources Board, Hawaii Department of Health, Joint Air Toxics Assessment Project, Nevada Division of Environmental Protection, Placer County Air Pollution Control District, San Diego Air Pollution Control District, and South Coast Air Quality Management District. In addition, analysis was conducted on 2006 data in the AQS database representing air toxics monitors maintained by these nine SLTs where one or more of the following six air toxics were sampled: 1,3- butadiene, acrolein, acrylonitrile, benzene, formaldehyde, and hexavalent chromium.

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### Key Findings and Recommendations

The evaluation resulted in six key findings:

1. There is a significant amount of consistency in air toxics monitoring objectives across agencies in EPA Region 9 with the national objectives, although differences in program design and implementation reflect variation in priorities across these objectives
2. National and SLT trends monitoring networks are complementary efforts although SLTs have experienced challenges with participation in the NATTS program that differ from challenges they face in their own air toxics monitoring efforts
3. Short-term and community-scale air toxics monitoring projects play an important role in characterizing air toxics and their health effects in EPA Region 9, while presenting unique resource and management challenges for SLTs
4. The complex nature of air toxics monitoring increases data quality and cross-agency data comparability challenges
5. Agencies across EPA Region 9 expressed strong interest in expanding cross-agency communication, information sharing, collaboration, and training related to air toxics monitoring
6. Air toxics monitoring data is being used and analyzed to varying degrees across EPA Region 9, and there is a general sense that increased attention is needed to effectively expand the use of the data for program planning and accountability

The evaluation resulted in five key recommendations:

1. Enhance opportunities for regional and national information sharing, communication, and coordination on air toxics monitoring methods and results
2. Increase communication and alignment of regional air toxics monitoring program objectives and elevate importance of linking air toxics monitoring to emissions reductions
3. Enhance scoping of local-scale air toxics monitoring efforts and communication about these activities to improve alignment with national, regional, state, local, and tribal objectives
4. Collaborate to identify solutions to common data quality and comparability problems and develop tools to enhance data usability
5. Explore methods for using air toxics monitoring data to evaluate programs and their ability to address monitoring objectives

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